REMARKS/ARGUMENTS

I. Introduction

This amendment is respectfully submitted in response to the Office Action dated December 29, 2004. The deadline for responding to the Office Action has been extended by way of a request for a 3 month extension of time submitted herewith to June 29, 2005.

Claims 1-19 and 27-45 are pending. Claims 20-26 have been canceled and new claims 35-45 have been added. Claim 1-7, 19, and 27-31 have been amended. Support for the amendments to claims 1 and 27 can be found in the last paragraph of page 19 and elsewhere in the specification. Support for new claims 35-45 can be found on pages 21, 23, and page 32 and elsewhere in the application.

II. The Objection to the Specification Has Been Overcome

Applicants have amended the specification to correct the spelling of the word "dotted" as per the Examiner's suggestions. Accordingly, it is submitted that the objection to the specification has been overcome.

III. The Pending Claims Are Patentable

1. The Rejection of the Pending Claims has been Overcome

A. General Discussion

U.S. Patent No. 5,533,094 to Sanmugam was used as the principal reference in rejecting the pending claims. Claims 1-3 and 5-34 were rejected under 35 U.S.C. 102(b) as being anticipated by this reference. The remaining claim, claim 4, was rejected as being obvious in view of

the Sanmugam patent when considered in combination with U.S. Patent No. 6,314,283 to Weber which is cited as showing including information indicting a state of device operation as part of a page. As will be discussed below, the Sanmugam patent does not teach disclose or suggest various features of the amended pending claims and the Weber patent does not make up for the deficiencies of the Sanmugam patent. Accordingly, the pending claims are patentable over the applied references whether they are considered alone or in combination.

B. The Applied Reference Does Not Anticipate or Render Obvious the Present Invention

The Sanmugam patent describes a system which uses a centralized paging system where the prioritization of incoming page requests occur in various elements outside of an access node in core network nodes 250, 252, 253 with the paging request being sent to and queued in a mobile switching center (MSC) 254 (see figures 1 and 9). The MSC 254 then sends page orders (see col. 12, lines 29-42) including previously determined paging priorities to base stations 256. The base stations 256 then transmit page massages in accordance with the previously determined priorities which were determined by one or more entities outside the base station. (See cols 12 and 13.)

The Sanmugam patent is based on receiving and processing of explicit incoming page requests received by various core network elements. This is in sharp contrast to various methods and apparatus of the present invention, such as the method of claim 1, which are directed to the receipt, at an access node, of a data message directed to an end node and determining a paging

requirement using packet classification based on a header field included in the data message.

Various embodiments of the present invention are also directed to other novel features. Such features provide access nodes, e.g., base stations, flexibility in determining resource allocation with regard to paging operations, e.g., with respect to generating pages in response to received data messages, paging information or paging requests.

The access node based paging control embodiments of the present invention are in sharp contrast to a case where paging decisions and determinations are handled in one or more core network nodes as is the case in the Sanmugam patent. An access node, which normally has more current information about limited airlink and other resources at the access node which may change in relatively short order in the case of wireless links, has the advantage of being able to use such current information in making paging resource allocation decisions and/or in priortizing paging requests. Such an access node based approach to paging control differs sharply from the centralized core based approach to paging taught by the Sanmugam patent.

Various embodiments and features of the present invention are also directed to novel resource allocation features which are not taught, disclosed or suggested by the applied references. For example, in some embodiments different amounts of a paging transmission resource are allocated to different paging requests. The paging transmission resources which may be allocated in accordance with this feature of the invention include such things as transmission power, bandwidth, frequency,

and transmission time slots. The Sanmugam and Weber patents do not teach, disclose, or suggest allocating to different paging requests different amounts of such resources.

Another feature of the present invention is directed to controlling paging latency and the use of paging latency constraints. The Sanmugam does not discuss paging latency constraints, e.g., limiting a page transmission delay to a maximum paging latency.

In view of the above discussion, it should be apparent that each of the pending claims includes one or more features which render the claims patentable over the applied references.

C. Reasons the Individual Claims are Patentable

1) Claims 1-19 are Patentable

Claims 1-19 are patentable because claim 1 recites the features indicated in bold below.

> A communications method, the method comprising:
> **operating an access node to receive a data message directed to an end node**; and
> **operating the access node to determine a paging requirement using packet classification based on a header field included in said data message.**

2) Claims 20-26 have been canceled.

3) Claims 27-34 are Patentable

> A communications system comprising:
> **a base station including:**

i) **means for receiving a data message directed to an end node**; and
ii) **means for determining a paging requirement using packet classification based on a header field included in said data message, said paging requirement being determined as a function of at least one of a quality of service indicator, a type indicator, a source indicator, and a destination indicator.**

4) New Claims 35-45 are Patentable

New claims 35-45 are patentable because of the features recited in these claims. The above discussion highlight various features recited in claims 35-45 are not taught, disclosed or suggested by the applied references. Accordingly, claims 35-45 are patentable for the reasons discussed above.

III. Conclusion

The pending claims are patentable over the applied references for the reasons discussed above. In the event there are any outstanding issues which need to be resolved to place the application in condition for allowance, the Examiner is invited to contact Applicant's under signed representative by telephone to discuss and hopefully resolve said issues.

Respectfully submitted,

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